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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/670,787	09/26/2003	Seung Jun Han	8733.597.01	4358

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MCKENNA LONG & ALDRIDGE LLP  
1900 K STREET, NW  
WASHINGTON, DC 20006

EXAMINER

HAN, JASON

ART UNIT	PAPER NUMBER
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2875

MAIL DATE	DELIVERY MODE
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11/20/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

Application No.

10/670,787

Applicant(s)

HAN ET AL.

Examiner

Jason M. Han

Art Unit

2875

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 9/17/2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on September 17, 2007 has been entered.

### ***Response to Arguments***

2. Applicant's arguments with respect to Claims 1-7 have been considered but are moot in view of the new ground(s) of rejection.

3. The prior art to Van Duijneveldt (U.S. Patent 5,975,722 A) remains commensurate to the scope of the claims as stated by the Applicant in the context of the body of the claim language and as broadly interpreted by the Examiner [MPEP 2111]. In response to Applicant's amendment, "wherein an equipotential low voltage is supplied to the low voltage electrodes of lamps respectively, and wherein an equipotential high voltage is supplied to the high voltage electrodes of lamps respectively", Van Duijneveldt clearly teaches that the high voltage electrodes of the lamps may be equipotentially high voltage as well as the low voltage electrodes of the lamp being equipotentially low voltage, and discloses, "In an alternative embodiment of FIG. 1, the lamps may also be connected pairwise (and alternately) to a power source. In this case, four power sources are necessary" [Column 6, Lines 45-47].

***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1-7 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. With regard to Independent Claims 1 and 5, nowhere in Applicant's disclosure is there sufficient evidence that the high voltage electrodes and the low voltage electrodes are supplied with an equipotential high voltage and equipotential low voltage, respectively. At present, Applicant's amendment to the claims is also considered new matter, which was not previously disclosed.

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*The following claims have been rejected in light of the specification, but rendered the broadest interpretation as stated by the Applicant within the context of the body of the claim language and as construed by the Examiner [MPEP 2111].*

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***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Van Duijneveldt (U.S. Patent 5,975,722 A).

6. With regards to Claim 1, Van Duijneveldt discloses a backlight unit including:

- A lamp housing [Figures 1A-B: (6)] having a first side and a second side opposite the first side; and
- A plurality of lamps [Figures 1A-B: (4<sup>n</sup>, 5<sup>n</sup>)] respectively having a low voltage electrode [Figure 1A: (b)] and a high voltage electrode [Figure 1A: (a)] each at opposite ends of the lamp, the lamps arranged substantially parallel in the lamp housing, a first end of each lamp nearer to the first side of the housing than to the second side of the housing so that the low voltage and the high voltage electrodes at the first ends of the lamps are alternately disposed at the first side of the lamp housing [Figures 1A-B],
- Wherein an equipotential low voltage is supplied to the low voltage electrodes of lamps respectively, and wherein an equipotential high voltage is supplied to the high voltage electrodes of lamps respectively [Column 6, Lines 45-47].

7. With regards to Claim 2, Van Duijneveldt discloses the backlight unit further incorporating a diffusion plate [Figures 1A-B, 5: (7, 47)] located on the lamp housing [Figures 1A-B: (6, 46)]; and an optical sheet [Figure 5: (53, 51)] located on the diffusion plate.

8. With regards to Claim 3, Van Duijneveldt discloses the low voltage electrode [Figure 1A: (b)] and the high voltage electrode [Figure 1A: (a)] are respectively arranged in zigzag fashion.

9. With regards to Claim 4, Van Duijneveldt discloses the low voltage [Figure 1A: (b)] and high voltage [Figures 1A: (a)] electrodes of the lamps being alternately arranged by a number greater than 2 at the first side of the lamp housing.

10. Claims 5-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Van Duijneveldt (U.S. Patent 5,975,722 A).

11. With regards to Claim 5, Van Duijneveldt discloses a liquid crystal display including:

- A back light unit including:
  - = A lamp housing [Figures 1A-B, 5: (6, 46)] having a first side and a second side opposite the first side;
  - = A plurality of lamps [Figures 1A-B, 5: (4<sup>n</sup>, 5<sup>n</sup>, 44<sup>n</sup>, 45<sup>n</sup>)] respectively having a low voltage electrode [Figures 1A-B: (b)] and a high voltage electrode [Figures 1A-B: (a)] each at opposite ends of the lamp and arranged substantially parallel in the lamp housing, a first end of each lamp nearer to the first side of the housing than to the second side of the housing so that the low voltage and the high voltage electrodes are alternately disposed at the first side of the lamp housing [Figures 1A-B];

- = A diffusion plate [Figures 1A-B, 5: (7, 47)] located on the lamp housing;  
and
- = An optical sheet [Figure 5: (53)] located on the diffusion plate; and
- A liquid crystal panel [Figure 5: (51)] disposed on the back light unit and  
having a plurality of liquid crystal cells arranged in matrix form,
- Wherein an equipotential low voltage is supplied to the low voltage electrodes  
of lamps respectively, and wherein an equipotential high voltage is supplied to  
the high voltage electrodes of lamps respectively [Column 6, Lines 45-47].

12. With regards to Claim 6, Van Duijneveldt discloses the low voltage electrode [Figure 1A: (b)] and the high voltage electrode [Figure 1A: (a)] are respectively arranged in zigzag fashion.

13. With regards to Claim 7, Van Duijneveldt discloses the low voltage [Figure 1A: (b)] and high voltage [Figures 1A: (a)] electrodes of the lamps being alternately arranged by a number greater than 2 at the first side of the lamp housing.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason M. Han whose telephone number is (571) 272-2207. The examiner can normally be reached on 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on (571) 272-2378. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.


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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jason M Han  
Examiner  
Art Unit 2875

JMH (11/14/2007)



Sandra O'Shea  
Supervisory Patent Examiner  
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